JOURNAL OF ELECTROANALYTICAL CHEMISTRY AND INTERFACIAL ELECTROCHEMISTRY

Vol. 289 Nos. 1 and 2 24 August 1990

CONTENTS

Approach to the molecular models of an interface based on the mean field approximation
E. Dutkiewicz and S. Lamperski (Poznan, Poland) 1

The impedance of surface recombination at illuminated semiconductor electrodes. A non-equilibrium approach
A. Goossens and J. Schoonman (Delft, The Netherlands) 11

Polarization modulation IR spectroscopic study of electrochemically generated species from TCNE at a gold electrode in the Kretschmann ATR geometry
T. Wadayama, Y. Momota, A. Hatta and W. Suëtaka (Sendai, Japan) 29

Synthesis, characterization and properties of poly(3-methyldiphenylamine) and poly(3-methoxydiphenylamine)
M.T. Nguyen and L.H. Dao (Varennes, Canada) 37

Role of sulphide additives on the performance of alkaline iron electrodes
K. Vijayamohanan, A.K. Shukla and S. Sathyanarayana (Bangalore, India) 55

Oxidation of formic acid at platinum microparticles dispersed in a polyaniline matrix. Influence of long-range order and metal–polymer interaction
M. Gholamian and A.Q. Contractor (Bombay, India) 69

Ac-impedance studies of charge transport and redox capacities at poly-4-vinylpyridine films on electrode surfaces
B. Lindholm (Umeå, Sweden) 85

Solid-state electrochemistry of iron hexacyanoferrate (Prussian Blue type) powders. Evidence for redox transitions in mixed-valence ionically conducting microstructures
P.J. Kulesza (Warsaw, Poland) 103

The growth of compact layers at the electrode interface. Part V. Films of Mo–Mg–methoxo-clusters active in nitrogen fixation
A.B. Gavrilov, V.V. Strelets (Chernogolovka, U.S.S.R.) and L. Pospíšil (Prague, Czechoslovakia) 117

Electrochemical and quartz crystal microbalance evidence for mediation and direct electrochemical reactions of small molecules at tetrathiafulvalene-tetracyanoquinodimethane (TTF-TCNQ) electrodes
M.S. Freund, A. Brajter-Toth (Gainesville, FL, U.S.A.) and M.D. Ward (Wilmington, DE, U.S.A.) 127

Interfacial and redox behaviour of prazepam and chlorazepate accumulation at the HMDE surface
A. Zapardiel, J.A. Pérez López, E. Bermejo and L. Hernández (Madrid, Spain) 143

Square-wave voltammetry of some bipyridinium oximes
Š. Komorsky-Lovrić (Zagreb, Yugoslavia) 161

Conductivity of ionic solutions of $LiAsF_6$ and $LiBF_4$ in equimolar mixtures of γ-butyrolactone with 2-methyltetrahydrofuran
A. Balkowska, J. Lesiński, G. Szymański and L. Werbian (Warsaw, Poland) 171

In situ FTIR studies on the adsorption and oxidation of n-propanol and isopropanol at a platinum electrode in sulphuric acid solutions
S.-G. Sun, D.-F. Yang and Z.-W. Tian (Xiamen, People's Republic of China) 177

Oxygen reduction in acid media on supported iron naphthalocyanine. Effect of isomer configuration and pyrolysis
A. Biloul, F. Coowar, O. Contamin, G. Scarbeck, M. Savy (Meudon, France), D. van den Ham (Enschede, The Netherlands), J. Riga and J.J. Verbist (Namur, Belgium) 189

Solubility and electrochemical determination of CO_2 in some dipolar aprotic solvents
A. Gennaro, A.A. Isse and E. Vianello (Padua, Italy) 203

Current oscillations during electrodissolution of a cobalt electrode induced by the presence of nitrate ions in sulphuric acid solutions
D. Sazou, M. Pagitsas and G. Kokkinidis (Thessaloniki, Greece) 217

(*continued on p. 3 of cover*)

Contents (*continued*)

Association of methyl, amino and hydroxy derivatives of adenine at a mercury electrode at various sodium chloride concentrations
J. Jursa and V. Vetterl (Brno, Czechoslovakia) 237

A study of bisulfate adsorption on Pt(111) single crystal electrodes using in situ Fourier transform infrared spectroscopy
P.W. Faguy, N. Markovic, R.R. Adzic, C.A. Fierro and E.B. Yeager (Cleveland, OH, U.S.A.) ... 245

In-plane structural and electronic characteristics of underpotentially deposited copper on gold (100) probed by in-situ X-ray adsorption spectroscopy
G. Tourillon, D. Guay (Orsay, France) and A. Tadjeddine (Meudon, France) 263

Short communications

STM imaging of Al(111) and polycrystalline Al samples in air
M. Szklarczyk, Lj. Minevski and J.O'M. Bockris (College Station, TX, U.S.A.) 279

A theoretical analysis of the Hg/D_2O interface
S. Lamperski (Poznan, Poland) 285

Preliminary notes

Electrochemical behaviour of polycrystalline silver in solutions containing tetraphenyl borate anion
S. Bharathi, K.L.N. Phani and G. Prabhakara Rao (Karaikudi, India) 291

Instability of sputtered platinum films on germanium reflection elements in aqueous solutions
E. Zippel, R. Kellner and M.W. Breiter (Vienna, Austria) 297

Book review 299

Author index 300

Subject index 301

JOURNAL OF ELECTROANALYTICAL CHEMISTRY AND INTERFACIAL ELECTROCHEMISTRY and BIOELECTROCHEMISTRY AND BIOENERGETICS

Publication schedule for 1990

Month	J	F	M	A	M	J	J	A	S	
J. Electroanal. Chem.	277/ 1+2 278/ 1+2	279/ 1+2 280/1	280/2 281/ 1+2	282/ 1+2 283/ 1+2	284/1 284/2	285/ 1+2 286/ 1+2	287/1 287/2	288/ 1+2 289/ 1+2	290/ 1+2 291/ 1+2	The publication schedule for further issues will be published later.
Bioelectrochem. Bioenerg.		298/1		298/2		298/3		299/1		